



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/559,768

12/22/2006

Osamu Muraoka

F-8870

8045

28107 7590 04/08/2008

JORDAN AND HAMBURG LLP
122 EAST 42ND STREET
SUITE 4000
NEW YORK, NY 10168

EXAMINER

SOLOLA, TAOFIQ A

ART UNIT

PAPER NUMBER

1625

MAIL DATE

DELIVERY MODE

04/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/559,768	Applicant(s) MURAOKA ET AL.	
	Examiner Taofiq A. Solola	Art Unit 1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 1625

Claims 1-20, are pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims improperly depend from their independent claims for failure to limit the scope of the independent claims, respectively. Both independent and dependent claims are drawn to the same compounds, while the dependent claims recite intended use. However, intended use is not a limitation of a compound or product. *In re Hack*, 114USPQ 161 (CCPA, 1957); *In re Craig*, 90 USPQ 33 (CCPA, 1951); *In re Brenner*, 82 USPQ 49 (CCPA, 1949). Also, something old or obvious does not become new upon discovery of new properties, functions or utilities, *In re Best*, 562 F.2d 1252; 195 USPQ 430 (CCPA, 1977). By deleting the claims the rejection would be overcome.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

For the purpose of this rejection, because of the phraseology “drug or food containing” in claims 15-20, they are deemed drawn to compositions.

Art Unit: 1625

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shingo et al., JP 54106477, and Pinto et al., US 6,455,573 B1, individually and in view of Ducep et al., US 5,157,116 A1, and Naohito et al., JP 2001/103928.

Applicant claims compounds of formula 1, their compositions in form of food and drugs, and method of use for inhibition of glucosidase. In preferred embodiments, A is alkylsulfonic or haloalkylsulfonic anion.

Determination of the scope and content of the prior art (MPEP §2141.01)

Shingo et al., teach toluenesulfonate of compounds of formula A, their compositions and method of use for suppressing blood sugar. See the English abstract.

Pinto et al., teach compounds of formulae I and XII, salacinol and kotalanol, their compositions and method of use for inhibition of glucosidase. See cols. 1-5, particularly, the formula in lines 21-33 of col. 5.

Ducep et al., teach various acids for salts of similar compounds, particularly the sulfonic acid salts, such as methanesulfonic and p-toluenesulfonic acids, their compositions and method of use for treating diabetes. See col. 1, lines 10-51.

Naohito et al., teach antidiabetic food containing carbohydrate digestive enzyme inhibitor. See the English abstract.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The difference between the instant invention and that of the prior arts is the bonds between the active compounds and their anions. In the prior arts there is covalent bond between them while in the instant invention it is ionic interaction.

The difference between the instant invention and that of Shingo et al., and Pinto et al., is that applicant claims the sulfonic acid salts of the active compound, while the prior arts do not teach sulfonic acid salt.

Art Unit: 1625

The difference between the instant invention and that of Ducep et al., is that applicant claims the alkyl or haloalkylsulfonic acid salts of the active compound instead of sulfonic acid salts in general, such as methanesulfonic and p-toluenesulfonic acids by Ducep et al.

The difference between the instant invention and that of Naohito et al., is that the prior art teaches food containing carbohydrate digestive enzyme inhibitor instead of specific inhibitors in the instant invention.

Finding of prima facie obviousness--rational and motivation (MPEP §2142.2413)

The instant invention is a combination of the teachings of the prior arts done in a way obvious to one of ordinary skill in the art. The choice of specific sulfonic acids, is an obvious selection available to the preference of an artisan. Therefore, the instant invention is prima facie obvious from the teachings of the prior arts. One of ordinary skill in the art would have known to claim the instant combination at the time the invention was made. The motivation is to avoid the prior arts, and because it is within routine experimentation.

Alternatively, the cyclic onium compounds, the sulfonic acids, the process of using the acids to make salts, and addition of antidiabetic drugs to food are not applicant's invention. They are in the public domain prior to the time the instant invention was made. Applicant has done no more than combine separate but well-known inventions. While the combination may perform a useful function it did no more than what they would have done separately. *In re Anderson*, 396 U.S. 57, 163 USPQ 673 (1969) cited in *KSR Int. Co. v. Teleflex Inc.*, 550 U.S. ----, 82 USPQ2d 1385 (2007). When a patent simply arranges old elements with each performing the same function it had been known to perform and yields predictable result, the combination is obvious. *In re Sakraida*, 425 US 273, 189 USPQ 449 (1976) cited in *KSR, supra*. A patent for such combination "obviously withdraws what is already known into the field of its monopoly."

Art Unit: 1625

Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 187 USPQ 303 (1950), cited in *KSR*, *supra*.

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taofiq A. Solola, PhD. JD., whose telephone number is (571) 272-0709.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, can be reached on (571) 272-0867. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

/Taofiq A. Solola/

Primary Examiner, 1625

April 3, 2008